

ing of certain leaves is a material help to the translocation of starch in them is probably sound, as such colouring matters screen off the rays which destroy the diastase.

3. That there exists in plants a power of absorbing and utilising the radiant energy of light, sometimes to a considerable extent, without the presence of a chlorophyll apparatus.

The last conclusion appears to be of very far-reaching importance, supplementing other observations already published by Engelmann,* Winogradski,† Speschnew, and other observers, none of whom, however, have indicated such utilisation of the rays of the visible spectrum.

“Fragmentation in *Lineus gesserensis*.” By ALEX. BROWN, M.B., B.Sc., M.A., Lecturer in Zoology, and Senior Assistant in the Natural History Department, University of Aberdeen. Communicated by Professor MCINTOSH, F.R.S. Received February 1,—Read February 25, 1897.

(Abstract.)

The following results are deducible from the investigations described in the paper:—

1. The zones of fission in *Lineus gesserensis* coincide with the transverse markings observable externally at definite intervals on its body.

2. The process of fission in all cases proceeds from *within outwards*, i.e., from the digestive canal towards the cutaneous tissues.

3. The process of fission is a process of solution, and that, too, through the agency of the digestive fluids of the alimentary tract.

4. The solution of the tissues of the body-wall at the zones of fission is preceded in those regions by circular outgrowths of intestinal epithelium together with the formation of corresponding external grooves.

5. In the plane passing through any zone of fission, there is distinct evidence of the exertion of continuous pressure in opposite directions, or pressure exerted outwards through the intestinal outgrowth is met by pressure exerted inwards in the same plane through the body-wall.

6. As the result of these opposing forces, atrophy, disintegration and disappearance of the outermost cells of the intestinal outgrowth take place. Thus the layers of the body-wall are brought into con-

* ‘Bot. Zeit.,’ 1888.

† ‘Ann. de l’Institut Pasteur,’ 1890—1891.

tact with the digestive cavity, and solution of the tissues proceeds outwards.

7. The ruptured surfaces are at once covered up by the intestinal outgrowth, and by the proliferation of the subjacent connective tissue.

8. The connective tissues all along the zone of fission multiply in order to aid in the healing of the fragments.

9. The intestinal epithelium changes in character as it takes up its new external position.

10. The whole process of fission has evident relationships to the process of sexual reproduction.

March 4, 1897.

The LORD LISTER, F.R.C.S., D.C.L., President, in the Chair.

A List of the Presents received was laid on the table, and thanks ordered for them.

In pursuance of the Statutes, the names of the Candidates for election into the Society were read, as follows:—

Allen, Alfred Henry, F.C.S.	Dresser, Henry Eales.
Baker, H. Brereton, M.A.	Edgeworth, Francis Ysidro, M.A.
Barrett, Professor W. F., F.R.S.E.	Elwes, Henry John, F.L.S.
Beevor, Charles Edward, M.D.	Etheridge, Robert, F.G.S.
Bell, Robert, LL.D.	Gamble, James Sykes, M.A.
Benham, William Blaxland, D.Sc.	Gray, Professor Thomas, B.Sc.
Binnie, Alexander Richardson, Mem. Inst. C.E.	Haddon, Alfred Cort, M.A.
Broadbent, Sir William Henry, Bart.	Haldane, John Scott, M.D.
Brown, Professor Ernest William.	Harcourt, Leveson Francis Vernon, M.Inst.C.E.
Budge, Ernest A. Wallis, D.Litt.	Harmer, Sidney Frederic, M.A.
Burch, George James, M.A.	Haswell, Professor William A., D.Sc.
Callaway, Charles, D.Sc.	Head, Henry, M.D.
Cardew, Philip, Major, R.E.	Howes, Professor George Bond, F.L.S.
Chree, Charles, M.A.	Kanthack, A. A., M.D.
Corfield, William Henry, M.D.	Kipping, F. Stanley, D.Sc.
Crookshank, Professor Edgar March, M.B.	Lansdell, Rev. Henry, D.D.
Dixon, Professor Alfred Cardew, M.A.	Lewes, Professor Vivian B., F.C.S.